

# Chapter 51

## Mars 360 and Quantum theory

In a request to the scientific community concerning Mars 360, I introduce a methodology that attempts to force fit the Maslow components(which has been applied to the Mars 360 system) into the ongoing dialectic of special relativity and quantum field theory. Such a dialectic has roots in theoretical postulates which date back to a German scientist named Max Plank. Following the quantum dialectic from Max Plank to Stephen Hawking, a brief summarization of quantum theory as understood today can be presented in this Chapter. From there, the connection between that and the Mars 360 system as it pertains to Mars's influence can be forced into the Quantum Field framework.

There are 2 major paradigms of theory which encompasses the general overview of how science regards the universe and all the matter contained within it. The first paradigm is centered around the smaller/microscopic components of our universe. This school of thought is defined under what is called Quantum field theory, which has roots in theoretical postulates put forth by Max Plank. Quantum field theory is a growing/evolving dialectic that provides us with a visual map of ideas that describe how atoms make up every aspect of our existence. Atoms comprise of electrons, protons, and neutrons. While Ernest Rutherford is credited for discovering the atom's structure, every idea which has led to and evolved from the discovery of the atom and their interactions with every particle in the universe can be traced to the scientific research of Plank. His formulation explained why the correlation between the rise of the frequency of radiation with the intensity manifests as sort of a bell curve at a certain temperature. Classical theory maintained that in a blackbody, the intensity of radiation should continue to climb at higher frequencies(Ultraviolet Catastrophe). Plank

postulated that energy is quantized and he also visually formulated the idea of electric oscillators vibrating at an increasing intensity until thermal equilibrium is reached. This inferred that the overall energy was limited by the vibrating oscillators, which thus explained why the intensity of radiation began to drop when a certain temperature was reached. This visual formulation of electric oscillators(along with quantized energy) would be conceptually applied to later theoretical applications seeking to make sense of light frequencies. This ultimately led to the discovery of electrons and later the entire atomic structure--an atom with a positively charged nucleus (containing protons and neutrons) with an electron revolving around the nucleus. Plank's idea of electric oscillators to explain the bell-like curve in blackbody radiation led to the formulation of how electrons make quantum jumps to different orbits in reaction to other particles.

Quantum theory posits that the existence of all the particles associated with atoms originate from a ubiquitous fluctuating quantum field. As a result, these particles are termed "quanta." This idea of an existing quantum field is where quantum theory has met obstacles in qualifying the precepts of relativity to the quantum framework --specifically when it comes to the origin of the space-time continuum. The dialectic of applying a gravitational field has been restricted by the difficulties of conjuring up the possibility of how its quanta could contain infinite amounts of space and time. This is where the relationship between Quantum theory and General Relativity breaks down.

The Quantum Field theory can be summed up as a chain of events correlating to a sequence of scientific thought that started with German scientist Max Plank's idea regarding electric oscillators vibrating at an increasing intensity until thermal equilibrium is reached. This ultimately led to Neils Bohr being able to formulate a visual of how

electrons jump into different orbits in reaction to different particles. Plank/Rutherford/Bohr make up the most significant components how science today understands the atomic structure: energy quanta, atomic nucleus, and electron jumps respectively. Combined with the postulate that the universe is made up of fluctuating quantum fields that spontaneously manifest everything that makes up the atomic structure gives us a stronger glimpse into how our visible universe exists.

Everything mentioned thus far is said to have a genesis in the Big Bang. It was then that all our current matter/energy/particles was contained and then released during the expansion following the Big Bang, which is believed to have started 13.8 billion years ago. The Big Bang itself was precipitated by another era lasting some 380,000 years. This era is called the Inflation era, which was an invisible universe containing its own ubiquitous field called the inflation field –spontaneously releasing its own quanta called inflations. Its eventual decay is what science believes gave rise to the Big Bang. And not just one Big Bang, but multiple Big Bangs and multiple universes. It's also hypothesized that this inflation field, even after its decay, remained remnant throughout our visible universe.....although still undetected. This concept of an inflationary early universe was suggested in the 1980s by three theoretical physicists: Alan Guth, Alexei Starobinsky and Andrei Linde. Theoretically, it is maintained that this inflation field would simply exist as vacuum field that no longer emits its inflations. The era preceding the inflation era is theorized as a time where actual space and time breaks down, leaving it such that one could not measure according to the laws of space and time. This is understood as what is behind “Plank’s wall.”

The other theoretical development regarding the nature of the universe is what is called the Theory of Relativity. This theory is divided into 2 fields of reference. One is General Relativity and the other is Special

Relativity. Just as Max Plank is credited with jump starting Quantum Theory, Albert Einstein is credited with formulating Relativity. In contrast to the Quantum theory framework which gives credence to the smaller/more microscopic components of the universe, Relativity is appropriately associated with the larger aspects of what makes up our universe, such as the planets, space, time, the galaxy, black holes, and gravity. When it comes to Relativity, Einstein is given a much greater recognition due to the magnitude of his discoveries and predictions. Relativity can credit its continued relevance in the fields of science to postulates laid forth by Copernicus and Galileo--postulates which confirmed that all the planets in our solar system revolved around the sun and not the other way around. Newton's work--concerning the gravitational pull and the predictable trajectory of objects--allowed Einstein to eventually define gravity as the bending of space and time by all matter contained within the universe.

This theory of gravity is challenged in 2 ways. First, as mentioned earlier, by the inability of the human mind to conjure the existence of a gravitational field emitting spontaneous bubbles containing an infinite amount of space and time. Second, by the existence of Black Holes, which suck in all matter by means of its own gravitational pull. In this formulation, all matter being sucked into the Black Hole would theoretically have to rupture space and time at some point. This creates a conundrum when it comes to the explanation of this phenomena. How does one use observation and the accepted notion of space and time to explain something outside of space and time?

It is understood that our visible universe began 13.8 billion years ago. Beyond that point, the universe was understood to be invisible, consisting of an inflation field which eventually decayed after 380,000 years, thus causing the Big Bang as all the contained matter/energy/

particles was released. Beyond the inflation era is left unquantifiable and is behind what is called Plank's wall. The Hawking-Hartle state theory postulated that behind this wall exists all possibilities that can be imagined and that these possibilities come from nothing.

In order to link dark matter and dark energy to the Mars 360 system, it would be important to try and make sense of dark matter from a quantum/relativity perspective. The inflation field, which existed for 380,000 years before the Big Bang has to be assigned as the field responsible for all things in the visible universe which are unseen and undetected. Its decay 13.8 billion years ago did not wipe out its actual existence. The remaining traces of this inflation field along with its quanta is understood as undetectable. The inflation field/big bang connection can be relegated as a macrocosm of the creative force for matter generated on Earth by minds who take an abstraction(hypothesis) and convert it to something concrete(invention).

Belief itself would have been generated from the inflation field before the decay of the inflation era gave birth to the Big Bang. A belief can be defined as an abstraction since it cannot be seen or detected until it is put into words or actions. One can postulate that because the inflation field is what defines the invisible universe, any remnant of its existence in the visible universe must also be invisible and undetectable. The decay of the inflation field can be assigned to the very essence of a quantum wave collapse, where the potential of the inflation field becoming realized.... ultimately broke everything the inflation field is comprised of—invisible matter or abstractions. Note: beliefs are no longer beliefs when manifestation of it takes place in reality or our visible universe. Such an outcome destroys the components of belief,

but never completely, which is why the inflations still linger in the visible universe.

One can present the idea that any theories which attempt to make sense of what is behind Plank's wall can itself exist from the inflation era and only formulated into words within the boundaries of the visible universe. The limits of abstract understanding are thus confined within the inflation era. The idea of nothing is incomprehensible behind Plank's wall. Any possibilities surmised by any theory is only generated and confined to the Inflation era and within the parameters of the visible universe. Conjuring such a thought and then explaining it is an element of the Inflation/Big Bang connection.

One can argue that components of the Inflation decay/Big Bang connection can contain the blueprint for understanding beyond the very realm of understanding. The strength of the Hawking-Hartle state theory shows how one can infer that probability is not an abstraction or even a concept. However, if one is to settle the discomfort arising from any notions of "something coming from nothing"(absent of cause and effect), then one must surmise the idea that "nothing" itself is "something" and therefore the idea of "nothing" can never stand alone. It essentially must always be preceded by "something." "Something" thus becomes the default original state. If "nothing" is not preceded by "something", then "nothing" can in no way be gauged or comprehended. Perhaps this draws clarity to the fundamentals of what is behind Plank's wall. The "nothing" behind Plank's wall is a "nothing" that simply cannot be comprehended, which would distinguish it from the "nothing" in the visible universe. The "nothing" in the universe would always be preceded by something, whereas the "nothing" behind Plank's wall would not and therefore be incomprehensible.

This confounds any notion that would make sense of the idea that the Inflation era was precipitated by a comprehensible string of events.

The question then becomes, “can the incomprehensible give rise to ‘something’”. If we make a rule that there is no such thing as “nothing giving rise to something”, and that “only the incomprehensible can give rise to something”, we can leverage for a more complete theoretical framework. “Something” now becomes the default state from where a comprehensible “nothing” can come from. The old notion of “something coming from nothing” can be replaced with “something coming from the incomprehensible”. The incomprehensible can always exist. Under this concept, another field can be applied (much like the other fields) to the quantum framework. A fluctuating field of incomprehensibility can be applied to what is behind Plank’s wall. However, this field cannot be known or comprehended according to a law of incomprehensibility. It also cannot be understood as something that decayed and released energy to initiate the birth of the Inflation era.

The Inflation era is composed of unidentified guesses, abstractions, hypotheses, possibilities of what happened or caused the Inflation era. The eventual breakdown of these unseen forces precipitated and caused the Big Bang, which was the universe’s attempt to create the incomprehensible that was behind Plank’s wall....in a visible form.

Ruminating on where space and time comes from has left the scientific community unsatisfied. While theorists have tinkered with the hypothetical viewpoint that gravity can be contained within a gravitational field, the ability to quantify the corresponding existence of particles—that would theoretically contain infinite amounts of space and time—have evaded the quantum consensus. Einstein discovered

that gravity is simply all matter bending space and time, creating slopes that objects essentially fall into.

If we gather concepts applied in Quantum theory and then take a look back at the nature of gravity as defined by general relativity, we can draw up a possible conclusion that spacetime is made up of electrons and is therefore “matter”. In Quantum theory, it is understood that humans cannot walk through walls because the electrons contained within both the human and the wall do not give way. The reaction of electrons contained within one source of matter --to the electrons contained within another-- is what makes the distinction between solids, liquids, and gases. In solids in reaction to other solids, the electrons do not budge. In solids amongst liquids, electrons of the liquids give way. In solids amongst gases, electrons of the gases move out of the way completely. Einstein’s theory of gravity as matter having a bending or stretching effect would be classified under the manner in which solids act upon liquids—where the electrons of the liquids would give way for the electrons of the solid. As a result, the Quantum field theory would relegate space-time as liquid and therefore allow us to designate space-time to the ubiquitous fluctuating quantum field, having it join all the other particles spontaneously generated from the field. There is no need for a gravitational field.

The break that would occur within a Black Hole—as the mass and density of all the matter contained within it finally breaks through the space-time slope—would lead to the incomprehensible, which is what is left over from its decay that set the Inflation era in motion. Just as remnants of the inflation field is understood to still exist in the visible universe, remnants of the incomprehensible field can also be said to have continued existing—through both the Inflation era and the visible

universe era. It has to be said again that the incomprehensible field cannot be known or theorized.

Dark matter, which is understood by science as undetectable, but still acting upon space-time, is subject to the vagaries of Quantum theory. If we apply space-time as a liquid, then theoretically we could apply to dark matter the status of a solid.

While a solid acting on a rubber surface, which space-time has also been likened to, can more easily infer that the correlation between matter and space-time is solid acting upon a solid, the reference to a solid acting on a liquid can outbid the aforementioned if the solid is acting on and within the liquid. A solid acting on and within the liquid can represent the slope creating relationship between matter and spacetime.

Dark Matter, from a Quantum theory perspective, has to be assigned as quanta from the ubiquitous fluctuating quantum field since its relationship to space time is represented now by matter and its effect on a liquid. Mars's influence on grey matter in the brain has to be posited from the very idea of dark matter—that something can exert a gravitational effect without being recognized. Astrology is the study of planetary influence of human behavior. The fundamentals of astrology in terms of how the individual is affected is largely centered around the place, day, and time a person was born. At the time a person was born, all the stars and planets were situated in a specific order. This order is visually represented in astrology by a circular map which is divided into twelve 30 degree sectors and contains the positions of the stars and planets relative to one's position on Earth at the time of birth. All twelve 30 degree sectors correlate with the zodiac sign positions along the ecliptic plane and represents a compartmentalization of all fundamental human characteristics and tendencies. In Ares Le Mandat,

the twelve 30 degree sectors are reduced to six.....with one sector and its corresponding opposite sector being interpreted as one full sector. This is how 12 sectors are interpreted as 6. All the contemporary viewpoints regarding which compartment of human experience each should contain was overhauled and replaced with the 6 components which make up Maslow's hierarchy of needs. Because of this, astrology in its contemporary dialectic, can be replaced with a more scientific theoretical based formulation.

The focus in Ares Le Mandat is Mars. It is posited that Mars, depending on its location at the time a person was born will cause a fundamental reduction of grey matter to the corresponding region of the brain, thus reducing the human's inclination to engage the full output of what that region of the brain is designated for. The resulting lack of inclination results in a reduced performance that feels natural for the affected human.

The sun is understood to be a source of Vitamin D for humans on Earth. Vitamin D is a mood elevator. It is thus not far fetched to surmise the possibility of another mass existing outside of Earth that would be able to emit something that can affect human behavior on Earth. If we take what is being hypothesized about Mars and apply it to the Vitamin D-producing sun, we can easily hypothesize that the position of the sun at the time a person was born would fundamentally affect (by way of how Vitamin D is absorbed from the sun) the area of the brain associated with the sun's position. Of course, the fetus cannot receive sunlight directly while in the womb. However, the mother can be influenced to experience a number of physiological processes that would have a direct impact on the development of the newborn.

The position of the moon is linked to having an affect on the tides of the ocean. The closer the moon to the Earth, the stronger the tides would become. Since our brain is contains water, the phases of the moon has been linked to the overall psychological reactiveness of humans during a given period.

A key component of what is understood about the sun's vitamin D influence and the moon's water influence must allow for a viewpoint that insinuates that whatever is emitted by the sun or the moon to directly impact the human or anything must have an ability to penetrate any earthly mass situated between what can be affected on Earth and what can affect Earth from space. If it is the case that penetration can occur, then any woman pregnant and ready to conceive can be affected by what the sun or the moon is releasing irrespective of where she is sheltered. The resulting physiological processes which take place upon human reception of Vitamin D or lunar influence can be activated in the pregnant woman, which would thus affect the child. Another perspective is that the child at birth, once extracted from the wound, can also be subject to the physiological processes.

In order to relate the influence of the stars and the planets to dark matter, one has to assume that whatever is released to facilitate transfer of the effect to humans must be able to bend space-time the same way that other matter does it. While it was understood that dark matter is a quanta that is spontaneously generated from the ubiquitous fluctuating quantum field, its invisible undetectable nature can be assigned to the transition period between the decay of the Inflation field at the end of the Inflation era and the start of the Big Bang. This leaves an option to start the visible universe at the start of the transition period between the end of an invisible universe and the start of the visible universe. It could then be understood that the transition particles contained matter that

was comprised of qualities from both the inflation era and the now visible universe. It essentially took aspects of both sides but conjoined to the visible universe. This allows dark matter to be comprehended but not seen, yet nonetheless understood to operate like matter in the visible universe. It would also give dark matter the ability to penetrate mass on Earth. This would give a case to the influence of Mars on human behavior.

The idea of Mars as an oppositionary force also lends to the idea of dark energy, which repulses matter such that it contributes to the increasing expansion of the universe. Conceptualizing how Mars can pull on grey matter in the brain can be put into context by comprehending the outcome arising from stars which eventually die. The core of a star is said to remain in the universe. This remaining core is called a white dwarf. It is very dense, hot, and aggressively tugs matter from the surface of a nearby orbiting star called a Red Giant. As this gravitational pull is taking place with an enormous amount of energy, gravitational waves are created and ripples travel throughout the entire universe.....altering space and time. If the energy released by the white dwarf is predicated on the color of the star, then the ripples released would translate to a dynamic between the white dwarf and the red giant as something contained during this effect. The result would open the case for Mars's unique reception of these ripples since Mars contains a red surface. The reason color is keyed in as significant is based on how our sun's heat is absorbed or reflected based on the color of the surface. White surfaces are known to reflect heat, while dark surfaces are known to absorb it. The fact that color plays a role in how heat is managed by surfaces allows us to view the color aspect regarding the surface of Mars as a significant factor which could help define the Mars 360 phenomena through the prism of Quantum theory and Relativity. "Astrology" no longer needs an official recognition. The influence of the planets on the

components of Maslow's hierarchy of needs lends enough credibility to the study. This offers a trajectory that can end with the inclusion of Mars 360 into the quantum field theoretical process.

Another way to quantify Mars 360 with the aspect of quantum theory would be to alter science's current notion of gravity. Instead of an idea that spacetime is altered by matter in the universe, one can hypothesize that humans are electromagnetic and are bound to the Earth by electromagnetic attraction. At the moment, science has an understanding that humans are electrically neutral. This, because when we try to attach a magnet to our skin, the magnet doesn't stick to us. However, with the notion that Earth is round, one has to figure out how humans located opposite earth-wise to where we are standing are not falling into the sky or into space.... at some point. If the curve generated by the Earth stretching the fabric of our universe keeps us tugged to the Earth, then one has to surmise how humans existing closer to the curve don't end up falling into the actual curve or getting squished between surface and the space-time slope. Perhaps matter's altering of space-time holds up better if the Earth would be flat. With the Earth understood as round, electromagnetism has a very strong case for the definition of gravity. First though, we would have to resolve why magnets do not stick to us. The only resolution be that magnetic attraction generated from the core of the earth-toward us-is more intense than the magnetic attraction between us humans and other objects. This would lead one to assume that the magnet that falls to the ground instead of sticking to us was prioritized to the core's electromagnetism. This doesn't infer that a magnetic attraction is nonexistent between humans and other objects. It could simply mean that the attraction is overridden by a much stronger one.

As you start to position a magnet on the door of a fridge, there is distance between the surface of the fridge and the surface of the magnet where the electromagnetic attraction would emit that tugging force that causes the magnet to stick to the fridge. Now somehow the fridge's attraction to the magnet had overridden the core of the earth's attraction to the magnet—when the magnet was within that distance(or range) which generated the magnetic force to make the magnet stick to the fridge. From what I have presented, one has to assume the fridge's surface is composed of the same particles that are within our earth's core. Of course, this would mean that humans would also stick to the fridge's door. This is not the case. One has to hypothesize that the components which cause the attraction between the magnet and the fridge do not exist in the human.

There is a minimum amount of speed --which if generated—would allow something to escape the earth's gravity. This speed is 126000 mph. This dynamic is easily represented by the minimum force necessary to pull a magnet from a fridge.

This also helps make sense of why a star's decaying core would eventually lead to the release of matter and energy upon its eventual death. Theoretically there would be no more electromagnetism to keep everything in tact.

With this electromagnetic theory of gravity, we can keep space-time but not as something stretchable. It would have to be something solid, but easily penetrated by the electromagnetic force between two objects, causing an object to naturally and continuously try and maneuver around it as an attempt to meet the attracting force. Imagine a noseguard in American football trying to sack the quarterback but has an offensive lineman blocking his path. Notice how the noseguard has

to often take a circular path while also spinning just so he can evade the offensive lineman and get to the quarterback. In quantum theory, it is understood that electrons are kept from collapsing into the nucleus by the existence of virtual pearls of light. If we reference that metaphorically to the football example, the offensive lineman would be the virtual pearls of light. This allows us to conjure up the existence of something keeping the planets from collapsing into the sun, thus causing the planets --much like the noseguard--to be left naturally having to maneuver around that something order to meet the object of attraction(which is the core of the sun). This is an electromagnetic theory of gravity.

This provides us with a gateway to a quantum theory of gravity. It allows us to simply explain the expansion of the universe by an aging and decaying electromagnetism from the every star's core. This allows attracted matter and energy to be released from such an attraction. With this postulate, we no longer need a gravitational field.

This decaying electromagnetic attraction of stars can also apply to black holes, which in terms of contemporary physics, are space-time slopes at the center of the galaxy. This slope sucks in nearby matter and particles. By defining black holes through the lens of electromagnetism, we can make sense of why it was discovered that particles and matter are eventually released from black holes....after being sucked in. It would seem that, just like stars, the electromagnetism at the core of black holes would release anything confined to its attractive force – should its electromagnetism decay after a period of time. And just like stars, we can also attribute the decay of a black hole's magnetic power to an expansion of the universe.

The electromagnetic force field should be visualized as a series of circular hills which expands from a center that contains a core magnetic force. Each circular hill is followed at specific intervals by another circular hill. Each circular hill encircles the previous one and are separated by a flat distance between them. The hill that encircles the core magnetic force is blocking a ball that is attracted to that magnetic force and is also causing the ball to circle the circular hill endlessly as the core magnetic force continues to attract the ball. Understanding that this magnetic force is still at work, one can imagine that if someone wanted to throw the ball over the circular hill(further away from the magnetic core) that encircles both the flat area and the hill closer to the magnetic core, one would have to throw it with enough force so that the ball goes over the hill and lands in the flat area over that hill. In this case, the attraction of the magnetic core was not broken by the velocity of the ball. The magnetic attraction was still at work since the ball would continue to simply maneuver in a circle around the circular hill blocking its path to the magnetic core's attraction...no different than it did in the previous area before it was thrown. Now imagine that over time as the magnetic core force weakens, the distance between each circular hill expands and the easier it becomes to challenge the magnetic force between the ball and the magnetic core, but the further the ball has to be thrown in order to go over the next circular hill into the next flat area. Its also important to point out that the electromagnetism would cause a faster orbit for the ball closest to it, and a slower orbit for the ball further away. Also important to mention is that each circular hill would contain holes which allow for the magnetism between the magnetic core and the ball to be generated. This all metaphorically should represent the electromagnetic force field. We can understand how when satellites are rocketed into space at 126000 mph, those satellites go into an orbit around the earth. My hypothesis is that it did not break earth's gravity, but simply had

enough velocity to go over that circular hill(if you will) that is hypothesized to exist within the electromagnetic force field. The satellite then got subsequently blocked further out from the earth's magnetic core but nonetheless still attracted to it and as a result still has to maneuver around in order to try and get back closer to the magnetic core.

With the earth being closer to the sun than Mars, Mars in its orbit around the sun would still contain some electromagnetic attraction toward both the core of the moon and the core of the earth. Since the moon is closer to earth than Mars, one can postulate that the moon's electromagnetic attraction to the earth would be stronger than Mars's attraction to the earth. Theoretically, planets further away from the sun than the earth is would contain a magnetic attraction to the earth that would interfere both with the human's attraction to the earth and also the earth's attraction to the sun. This faint tug on the human and the earth by way of Mars's electromagnetic attraction would be stronger than any other electromagnetic attraction the remaining outer planets would have with the humans and the earth. The nature of the orbit would also correlate to the nature of the influence.

The hypothesis about Mars's influence describes how depending on where Mars's position was at the time a person was born, the corresponding lack of grey matter in the brain sector that is represented by Mars's position would cause a person to carry out –with a certain lack of energy and intention-- the tasks which are designated to the region of the brain affected. For instance, if Mars's position at the time of birth is located in a spot that corresponds to the occipital lobe, the person would be naturally inclined to display a certain lack of energy, care, or intent toward how he perceives moving objects(including humans) and how he manages face to face communication within his

immediate environment. Ares Le Mandat posits that this is the result of a gravitational magnetic pull from the planet Mars. This, as a result, would make it harder for a person to carry out such tasks with the same ease as someone who is not influenced by Mars in that same manner. The person influenced by Mars differently would display a lack of care/intent/energy towards something else. Ares Le Mandat infers that care needs to be taken in how this is held against a person, such that it may warrant a societal attempt to accommodate this influence.

With an electromagnetic outlook, we can interpret black holes as a recycle bin for matter released from dying stars. Since it is now hypothesized that both stars and black holes are generating a magnetism that is weakening over time and thus causing matter to move further away, we can surmise that the size of a black hole in relation to a star would imply that a star would lose all of its magnetic force before a black hole would. The result is that after all the matter is released as a result of the star's declining magnetism and subsequent death, the black hole's magnetic power would take over and begin pulling the released matter towards itself. The weakening magnetic power of the black hole would then cause an eventual release of the matter it sucked in to then begin expanding back into the universe away from the black hole. One can draw upon Plank's idea of electric oscillators to describe a black hole's loss and gain of magnetic power from the matter and energy it sucks in and then releases respectively. Essentially, black holes are kept alive by matter and energy released from dying stars.

The earlier reference to the idea that the electromagnetic force field that binds two things together should be visualized as containing a series of circular hills—all of which encircles the previous one along with the flat

space in between—should also be considered analogous to the virtual pearls of light that keep electrons from collapsing into the nucleus. This allows us to formulate a hypothesis that the structure of the atom is a microcosm of the larger universe. This makes it so that the pearls of light in the atomic structure(as described in contemporary quantum mechanics) can be used to describe the star/planetary structure. In the star planetary structure, these virtual pearls of light(analogously speaking) could have a concrete way of being explained due to the existence of the sun's light.

It may be possible for quantum field theory to become more independent of the ideas of relativity. For instance, Einstein's idea of time dilation, which fosters a concept describing how the further and faster we move away from earth, the faster the time on earth ticks relative to our position moving further away from the earth's clock. While one second on our watch would remain one second, the one second on our watch would start to equal two seconds on earth's watch, with the difference between our watch and earth's watch continuously expanding. Incrementally, as we move further away from earth's clock, one second on our watch starts equal three seconds on earth's clock, and then four, and then five, etc...as we continue to move away. An alternative notion that can be applied to this phenomena takes into account the orbit of the earth around the sun. If we are moving away from earth but always in view of the earth's clock, then we would have to increase our speed around the sun in order to maintain that respective field of view since the further we would get away from the sun, the further we would have to travel in order to make one revolution around the sun. So to stay in view of the earth's clock, we would have to attain more speed than what the earth uses for completing one revolution around the sun (in one earth year) in order for us to stay in direct view of the earth as we get further away. But in that case, one second should always equate with one

second on earth's clock. If our movement away from earth is devoid of any orbit around the sun, then such a test could not be carried out because the earth's notion of time as it relates to the clock is directly correlated to its movement around the sun. Therefore, measuring in this way would make it obvious that one second for something not covering any space in terms of orbit would lag behind something that moves in the span of one second. If time dilation is related to a measurement where the speed of orbit is the same and one year equates to one revolution around the sun, then the difference in time becomes a matter of geometry. Imagine a track and field with a thousand lanes and two runners preparing to race around the track. One runner is in the first and innermost lane, while the other runner is directly horizontal to the first runner, but is set to start the race in the furthestmost lane, the 1000<sup>th</sup> lane. Imagine the finish line being the marker that metaphorically represent the finish of one day. If both runners start running the race at the same time and at the same speed, the runner in the innermost lane will reach the finish line/1 day marker first. If one then applies the notion of seconds around every lane, to where each lane would have the same total amount marked on the track of what constitutes one second, one can expect the seconds marked off in the first innermost lane to be smaller in distance than the seconds marked off in the outer lanes. The total intervals of space on the track between where one second would start and end would be smaller in distance in the inner lane if each lane applies at equidistant intervals—filling an entire lap around the track—the same amount of seconds as the other lanes.

When taking orbit into account, what constitutes time naturally expands as one goes to an outer orbit, but yet doesn't change or alter our notion of time as it exists from the place from which we came. If we leave earth, but yet maintain earth's notion of one year as earth orbits

the sun, we are forced to stretch the intervals comprising the seconds and hours within a day to make it fit earth's notion of one day because our orbit becomes much greater in distance than earth's orbit around the sun....the further we get away. However, if we continuously maintain a speed which allows us to complete an orbit around the sun in the same time which it takes the earth, we can keep earth's notion of time and also expect the time on earth to remain the same as our time—no matter how far we get away from the earth.

According to french physicist Paul Langevin, in reference to Einstein's theory of relativity concerning time dilation, if a traveler who was sent in a rocket on a six month round trip away from earth at 99 percent of the speed of light, everyone who stayed on earth would orbit the sun 50 times during the time the traveler is traveling on the rocket. This means according to Einstein, that the traveler's experience of 6 months on the rocket would equate to an experience of 50 years for anyone on earth.

One can detract and presume that the traveler's experience of 6 months on the rocket ship would match the same 6 months that the people left on earth would experience. Since the traveler is moving at the speed of light at a straight path away from from earth and making a 6 month round trip, the rules of time on his watch ultimately will equal the rules of time on earth's watch. Because the rate at which the standard concerning the amount of total seconds in six months (based on the number of seconds in half a revolution of the earth around the sun) would have to be increased at each longer orbit around the sun that arises from getting further away from the earth. This would be canceled out by the rate it would have to be decreased upon each closer orbit around the sun that arises when moving closer to the earth when the traveler would be on his way back to earth.

Half an orbit of the earth around the sun is 6 months. Half an orbit round the sun would take longer the further you would move away from the earth. The traveler is traveling through these incrementally further orbits at light speed. Because of that, in 3 month's time when the traveler gets to the farthest point away from the earth—according to the parameters of his trip—he would be on an orbit where half a distance around the sun would now comprise of significantly more seconds than the time it takes earth to go half a distance around the sun. Because he is moving at light speed and essentially flying through the larger orbit (without actually staying within any orbital path), only the meaning of one second (relative to how long it would take earth to orbit the sun) changes on his watch from an earth person's perspective. The traveler is not on any one orbital path long enough for someone on earth to experience the difference in seconds between his orbit and earth's orbit. Because of that, the traveler ultimately returns in 6 months from the earth person's perspective.

From my perspective on earth, during the 6 months time I watch the traveler leave earth on a straight path at light speed, I am only seeing the meaning of (the traveler's) one second change as he gets further away from the earth. Since I know he is not stopping to complete any further away orbital path around the sun, but blasting at light speed through every change in what would comprise—in seconds—half a revolution around the sun, I can expect that he would return in 6 months. If the intervals of time between seconds (when regarding light speed) depends on the orbital path position, meaning light speed theoretically slows down as seconds on earth have to be stretched for every further and thus larger orbit in order that the time interval between seconds there (making up one revolution around the sun) would match the total seconds comprising an earth revolution around the sun, then I would expect a longer wait as one second on each

further-out orbital path around the sun would equal increasingly more earth seconds.

Sources:

“The Universe in your Hand: A Journey through Space, Time, and Beyond” by Christophe Galfard

“Introducing Quantum Theory” by J.P. McEvoy and Oscar Zarate